In the Claims:

Please cancel claim 1, and 9 without prejudice.

Please amend claims 2, 4-8, and 10-17 as follows:

1. (canceled)

2. (currently amended) A method for implementing dynamic cosimulation as recited in ~~claim 1~~ claim 6 further includes the steps of checking whether said identified at least one user selected optimization control signal for disabling said cosimulation bridge remains active; and responsive to said identified at least one user selected optimization control signal being inactive for enabling said cosimulation bridge.

3. (original) A method for implementing dynamic cosimulation as recited in claim 2 further includes the steps of dynamically re-engaging said primary simulator and said secondary simulator for said data exchange responsive to said enabling said cosimulation bridge.

4. (currently amended) A method for implementing dynamic cosimulation as recited in ~~claim 1~~ claim 6 wherein the step of defining a plurality of user selected optimization control signals over said cosimulation bridge further includes the steps of defining a single sided disable; said single sided disable defining a disable control signal for one of said primary simulator or said secondary simulator.

5. (currently amended) A method for implementing dynamic cosimulation as recited in ~~claim 1~~ claim 6 wherein the step of defining a plurality of user selected optimization control signals over said cosimulation bridge further includes the steps of

defining a two independent disable; said two independent disable defining a respective disable control signal for each of said primary simulator and said secondary simulator.

6. (currently amended) A method for implementing dynamic cosimulation ~~as recited in claim 1 wherein the step of~~ comprising the steps of:

utilizing a cosimulation bridge for data exchange between a primary simulator and a secondary simulator;

defining a plurality of user selected optimization control signals over said cosimulation bridge ~~includes~~ including the steps of defining a functional OR disable; said functional OR disable defining a common disable for both said primary simulator and said secondary simulator; either said primary simulator or said secondary simulator activating a functional OR disable to activate said common disable;

identifying at least one user selected optimization control signal for disabling said cosimulation bridge; and

dynamically disengaging said primary simulator and said secondary simulator for ending data exchange responsive to said disabling said cosimulation bridge.

7. (currently amended) A method for implementing dynamic cosimulation ~~as recited in claim 1 wherein the step of~~ comprising the steps of:

utilizing a cosimulation bridge for data exchange between a primary simulator and a secondary simulator;

defining a plurality of user selected optimization control signals over said cosimulation bridge ~~includes~~ including the steps of defining a functional AND disable; said functional AND disable defining a common disable for both said primary simulator

and said secondary simulator; both said primary simulator and said secondary simulator activating a functional AND disable to activate said common disable;

identifying at least one user selected optimization control signal for disabling said cosimulation bridge; and

dynamically disengaging said primary simulator and said secondary simulator for ending data exchange responsive to said disabling said cosimulation bridge.

8. (currently amended) A method for implementing dynamic cosimulation as recited in ~~claim 1~~ claim 6 wherein the step of defining a plurality of user selected optimization control signals over said cosimulation bridge includes the steps of defining a suspend signal for each of said primary simulator and said secondary simulator.

9. (canceled)

10. (currently amended) Apparatus for implementing dynamic cosimulation as recited in ~~claim 9~~ claim 14 wherein said control program for identifying said identified at least one user selected optimization control signal being deactivated for enabling said cosimulation bridge and dynamically re-engaging said primary simulator and said secondary simulator for data exchange.

11. (currently amended) Apparatus for implementing dynamic cosimulation as recited in ~~claim 9~~ claim 14 wherein said plurality of user selected optimization control signals defined over said cosimulation bridge further include a plurality of disable control signals and a plurality of suspend signals.

12. (currently amended) Apparatus for implementing dynamic cosimulation as recited in ~~claim 9~~ claim 15 wherein said plurality of user selected optimization control

signals defined over said cosimulation bridge further include a single sided disable; said single sided disable for defining a disable control signal for one of said primary simulator and said secondary simulator.

13. (currently amended) Apparatus for implementing dynamic cosimulation as recited in ~~claim 9~~ claim 14 wherein said plurality of user selected optimization control signals defined over said cosimulation bridge include a two independent disable; said two independent disable for defining a respective disable control signal for each of said primary simulator and said secondary simulator.

14. (currently amended) Apparatus for implementing dynamic cosimulation ~~as recited in claim 9 wherein said~~ comprising:

a cosimulation bridge for data exchange between a primary simulator and a secondary simulator;

a plurality of user selected optimization control signals defined over said cosimulation bridge ~~include~~ including a functional OR disable; said functional OR disable for defining a common disable for both said primary simulator and said secondary simulator; said common disable being activated responsive to a functional OR disable control from either said primary simulator or said secondary simulator; and

a control program for identifying at least one user selected optimization control signal for disabling said cosimulation bridge; and for dynamically disengaging said primary simulator and said secondary simulator for ending data exchange responsive to said disabling said cosimulation bridge.

15. (currently amended) Apparatus for implementing dynamic cosimulation ~~as recited in claim 9 wherein said~~ comprising:

a cosimulation bridge for data exchange between a primary simulator and a secondary simulator;

a plurality of user selected optimization control signals defined over said cosimulation bridge ~~include~~ including a functional AND disable; said functional AND disable for defining a common disable for both said primary simulator and said secondary simulator; said common disable being activated responsive to a functional AND disable control from both said primary simulator and said secondary simulator; and

a control program for identifying at least one user selected optimization control signal for disabling said cosimulation bridge; and for dynamically disengaging said primary simulator and said secondary simulator for ending data exchange responsive to said disabling said cosimulation bridge.

16. (currently amended) Apparatus for implementing dynamic cosimulation as recited in ~~claim 9~~ claim 15 wherein said plurality of user selected optimization control signals defined over said cosimulation bridge further include a suspend signal for defining a respective suspend control signal for each of said primary simulator and said secondary simulator.

17. (currently amended) A computer program product for implementing dynamic cosimulation in a computer system including a cosimulation bridge for data exchange between a primary simulator and a secondary simulator, said computer

program product including instructions executed by the computer system to cause the computer system to perform the steps of:

defining a plurality of user selected optimization control signals over said cosimulation bridge including the steps of defining a functional OR disable; said functional OR disable defining a common disable for both said primary simulator and said secondary simulator; either said primary simulator or said secondary simulator activating a functional OR disable to activate said common disable;

identifying at least one user selected optimization control signal for disabling said cosimulation bridge; and

dynamically disengaging said primary simulator and said secondary simulator for ending data exchange responsive to said disabling said cosimulation bridge.

18. (original) A computer program product for implementing dynamic cosimulation as recited in claim 17 wherein said instructions further cause the computer system to perform the steps of checking for said identified optimization control signal being inactive and responsive to said identified at least one user selected optimization control signal being inactive for enabling said cosimulation bridge and dynamically re-engaging said primary simulator and said secondary simulator for data exchange.